BEFORE THE

FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Part 101 of the Commission's Rules to Facilitate the Use of Microwave for Wireless Backhaul and Other Uses and to Provide Additional Flexibility to Broadcast Auxiliary Service and Operational Fixed Microwave Licensees	)	WT Docket No. 10-153
	)	
Petition for Rulemaking filed by Fixed Wireless Communications Coalition to Amend Part 101 of the Commission's Rules to Authorize 60 and 80 MHz Channels in Certain Bands for Broadband Communications	)	RM-11602
	)	

COMMENTS OF FIBERTOWER CORPORATION

FiberTower Corporation ("FiberTower")[1] submits these Comments in the Federal Communications Commission's ("Commission") above-captioned proceeding, in response to the

[1] FiberTower is a leading alternative backhaul provider in the U.S., with an extensive spectrum footprint, carrier-class microwave and fiber networks in 13 major markets, customer commitments with the leading commercial mobile carriers, partnerships with leading government contractors, a GSA Schedule 70 holder, and partnerships with the largest tower operators in the U.S., which provide FiberTower with access to over 130,000 towers and buildings. Commercial mobile carriers, enterprises and government agencies rely on FiberTower's backhaul and premises access solutions to deliver mission- and business-critical performance.

Further Notice of Proposed Rulemaking ("*Further Notice*") released by the FCC in August 2011.[2]

In the *Further Notice*, the Commission seeks comment on increasing the flexibility of the Part 101 rules to promote wireless backhaul. It addresses Part 101 antenna standards, efficiency standards in rural areas, a petition for rulemaking filed by FWCC seeking wider channels at 6 GHz and 11 GHz, among other proposals.[3] FiberTower comments on various aspects below.

A. Allow the deployment of smaller antennas by amending Part 101

FiberTower generally endorses the Commission's proposal to adopt the Category B technical parameters for the table in 47. C.F.R. § 101.115(b) as proposed by Comsearch.[4] The standards proposed by Comsearch permit smaller and lighter antennas in the 6 GHz, 18 GHz, and 23 GHz bands.[5] These standards should be expanded to include 4 GHz as well. Such standards should not be unwaiverable, especially in rural and distinctively underserved areas, where only deploying systems that strictly apply could occasionally result in a hardship, as well as the continued disuse of substantial quantities of fallow spectrum. Accordingly, FiberTower

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[2] In the Matter of Amendment of Part 101 of the Commission's Rules to Facilitate the Use of Microwave for Wireless Backhaul and Other Uses and to Provide Additional Flexibility to Broadcast Auxiliary Service and Operational Fixed Microwave Licensees, *Report and Order, Further Notice of Proposed Rulemaking, and Memorandum Opinion and Order*, WT Docket 10-153, FCC 11-120 (rel. Aug. 9, 2011)(*"Further Notice"*).

[3] *Id*. at ¶ 69.

[4] *Id.* at fn. 232.

[5] *See* In the Matter of Amendment of Part 101 of the Commission's Rules to Facilitate the Use of Microwave for Wireless Backhaul and Other Uses and to Provide Additional Flexibility to Broadcast Auxiliary Service and Operational Fixed Microwave Licensees, WT Docket 10-153, *Comsearch Ex Parte Filing* (filed April 14, 2010), *available at:* http://fjallfoss.fcc.gov/ecfs/document/view?id=7021238104

supports the continued flexibility shown by the Wireless Telecommunications Bureau in occasionally granting waivers, as noted in the *Further Notice.*[6]

As supported in the record, smaller antennas are less expensive to manufacture, install, and maintain, and provide for superior economics in terms of tower or rooftop space rental. These smaller antennas also allow for the collocation of more systems, thus delivering more backhaul bandwidth to consumers, communities, carriers, businesses and governments in the intended area.

Additional savings occur in the entire logistical chain, which may include, and is not limited to:

- Storage of spares on-site and in local, regional and national warehouses and in engineering and network services preparation and staging sites.
- Storage and inventory of spares in operations and maintenance vehicles.
- The number of workers and the size and weight of cranes and other equipment that may be necessary to hoist, deploy, reconfigure, or decommission equipment.
- Use and storage and deployment of lighter mounting systems to complement the smaller antennas.
- Cost of materials need to build and package the equipment.
- Cost of shipping equipment between all the manufacturing, testing, warehousing, staging, vehicle, and usage sites. The difference between 6'-8' antennas that weigh 400-600 or more pounds, and 2'-3' foot antennas that weigh 28-100 pounds is significant.

[6] *Further Notice* at ¶ 79; also fn 245.

- Additionally, since smaller antenna systems utilize less fuel and materials to build, ship, store and deploy, they have a dramatically smaller carbon footprint.

B. Relax efficiency standards in rural areas

FiberTower supports lowering minimum traffic loading payload percentages for rural areas. The reasons are similar to some of the reasons noted above for allowing smaller antennas. In certain rural and distinctively underserved areas, only deploying systems that strictly apply to existing payload percentages could occasionally result in a hardship, as well as failing to use substantial quantities of fallow spectrum. FiberTower supports relaxed minimum traffic loading payload percentages in order to incentivize the introduction of backhaul service to those areas. Of course, backhaul providers could provide higher payload percentages if they so choose, and as economic conditions permit.

C. Enact the proposed wider channels in the 6 GHz and 11 GHz bands

FiberTower strongly endorses the FWCC proposal to allow 60 megahertz channels in the lower 6 GHz band and 80 megahertz channels in the 11 GHz band, as coordination permits.[7] The proposal allows backhaul operators to handle more capacity and offer faster data rates. Equipment exists for these style deployments as does a strong need in the marketplace for higher payloads. For example, Microwave Extension Links ("MELs") can assist 4G carriers by carrying up to 1 Gbps back to their fiber backbones.

[7] *See* Petition for Rulemaking filed by Fixed Wireless Communications Coalition to Amend Part 101 of the Commission's Rules to Authorize 60 and 80 MHz Channels in Certain Bands for Broadband Communications, RM 11602, *FWCC Petition* (filed May 14, 2010).

FiberTower also agrees with the National Spectrum Management Association, which noted in its original Comments that it is much more efficient to coordinate combined channels, thus reducing adjacent channel interference.[8]

CONCLUSION

As more fully discussed above, FiberTower supports modification of Commission rules to increase technical efficiency in the Part 101 bands, by permitting smaller antennas in the 4, 6, 18, and 23 GHz bands, relaxing required efficiency standards in certain rural areas, and allowing wider channels in the 6 and 11 GHz bands.

Respectfully submitted,

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[8] In the Matter of Amendment of Part 101 of the Commission's Rules to Facilitate the Use of Microwave for Wireless Backhaul and Other Uses and to Provide Additional Flexibility to Broadcast Auxiliary Service and Operational Fixed Microwave Licensees, *National Spectrum Management Association Comments*, at 3 (filed Oct. 25, 2010).